

Notice of Allowability

Application No.

10/007,391

Examiner

James C Kerveros

Applicant(s)

NOLLES ET AL.

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to AMENDMENT filed May 21, 2004.
2. ☒ The allowed claim(s) is/are 1-14.
3. ☒ The drawings filed on 22 October 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 3/22/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

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Eugene J. Lamarre
Primary Examiner

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DETAILED ACTION

1. This Office Action is in response to Amendment filed May 21, 2004.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney for Applicant, Mr. Flynt on June 30, 2004.

The application has been amended as follows:

Claim 1, in the fourth paragraph on line 4, "an external device" was changed to "the external device".

Claim 13, in the fifth paragraph on line 5, "an external device" was changed to "the external device".

Claim 14, in the fourth paragraph on line 2, "an external device" was changed to "the external device".

Allowable Subject Matter

3. Claims 1-14 are allowed.

REASONS FOR ALLOWANCE

4. The following is an examiner's statement of reasons for allowance:

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The prior arts of record taken alone or in combination fail to teach, anticipate, suggest or render obvious the claimed invention, recited in the independent Claims 1, and 13, of a functional circuit connected to a structural testing device through an indirect interface for testing the structure of a logic circuit, wherein the functional circuit driving the logic circuit through a direct interface, receiving test commands from an external device through a standard interface, and partially forwarding test commands to the indirect interface for indirectly driving the logic circuit.

Independent claim 14 also recites the limitations, which are not found in the prior arts of record and when taken alone or in combination fail to teach, anticipate, suggest or render obvious the claimed invention of a functional circuit having a standard interface connected to an external device for transmitting and for receiving test commands through the standard interface, and an indirect interface for indirectly driving a logic circuit and for connecting the functional circuit to the structural testing device, and a direct interface connecting the functional circuit to the logic circuit, and wherein the functional circuit driving the logic circuit through the direct interface and partially forwarding the test commands to the indirect interface.

Consequently, independent claims 1, 13 and 14 are allowed over the prior arts of record. Claims 2-12, are directly or indirectly depended upon independent claim 1 and therefore are also allowable.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kraus et al. (US 6587979) discloses (FIG. 7) a structural testing device (core wrappers 24) for testing various tests on (RAMs 12), a functional circuit (BIST controller 64) connected to the (core wrappers 24) through an indirect interface (JTAG bus). The functional circuit receiving test commands from an external device (IC tester 21) through a standard interface between IC 10 and IC tester 21 and forwarding the test commands from the IC tester 21 for indirectly driving the (RAMs 12) through (core wrappers 24). Kraus does not disclose a logic circuit to be tested and also, a test functional circuit for driving the logic circuit through a direct interface and for partially forwarding the test commands to the indirect interface for indirectly driving the logic circuit.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James C Kerveros whose telephone number is (703) 305-1081. The examiner can normally be reached on 9:00 AM TO 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner's Fax: (703) 746-4461
Email: james.kerveros@uspto.gov

Date: 30 June 2004
Office Action: Allowance

By: 

James C Kerveros
Examiner
Art Unit 2133

Guy J Lamarre
Primary Examiner

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